U.S. Department of Agriculture
Office of the Secretary

For Immediate Release

BREAKING NEW GROUND IN WILDLIFE MANAGEMENT

I'm glad to be here and I feel right at home. For most of my life I've been deeply involved with wildlife, with the U.S. Forest Service; with the National Wildlife Federation, with the Wilderness Society and other groups.

The Department I work for, Agriculture, has deep involvement with the lands that are vital to wildlife, so I think we have a lot in common.

As civilization spreads, it influences wildlife in-thousands of ways. Once human beings begin to use natural resources -- to manage land -- each activity changes wildlife habitat, even though the changes may be so subtle that we must conduct major research to even measure them.

There's tremendous competition among land users in the United States and often wildlife has lost the competition. A number of activities have caused habitat loss. Today, 2,000 acres of rural land are urbanized every day. More and more human activity in remote areas changes habitat. As habitat changes, new species come in and others may leave. This change cannot objectively be called good or bad, unless the manager of that land has some goals.

What we're talking about is land management. Traditionally, land management in the United States has been pretty single-minded. Private lands have often been managed strictly for production of crops, or production

---

Remarks by Dr. M. Rupert Cutler, Assistant Secretary of Agriculture for Conservation, Research and Education, at the first National 4-H Wildlife Conservation Teen Leaders Workshop, Washington, D.C., August 11, 1977

---

of timber, or for recreation. They can be managed for several uses at the same time, and quite successfully, including wildlife population enhancement.

Wildlife in the United States is found mainly in forested areas and farmlands, where the Department of Agriculture plays a unique role. The Department's role in renewable natural resources management goes beyond influencing decisions on privately-owned farmland. Through our direct management of the National Forest system and our help to farmers, ranchers, and other private-land resource managers, we influence to some degree what happens on almost three-fourths of the land in the United States. And this is obviously the non-urban land, where wildlife is most abundant.

I'm committed to breaking new ground in USDA wildlife policies. But I don't intend to throw out the progress we've made over the past decades. My proposals build on the experience gained through 70 years of managing the National Forest system, tied to major new legislation which allows us to go forward in public land resource management, plus the experience gained by the Soil Conservation Service over many years in working with private landowners.

The Forest Service-related legislation I'm referring to are the Resources Planning Act and the National Forest Management Act. They tie assessments of future needs to long-range planning. For instance, in 1975 the Forest Service improved 175,000 acres of wildlife habitat. With long-range planning, the Forest Service hopes to improve more than 10 times this amount each year by the year 2000.

In the long run, I am committed to pursuing what I call "holistic management" on the lands which the Forest Service manages, and encouraging its use on private lands as well, through Extension and other USDA educational programs.

To explain holistic management, or on "ecosystem approach," let's use the 187 million acres of National Forest lands as an example. 187 million acres is an almost inconceivable number -- big as Texas, Massachusetts, Delware, Rhode Island, New Hampshire and Connecticut combined.

Wildlife is one of the multiple resources for which the National Forests are managed. Other resource uses include recreation, wilderness, watersheds, domestic livestock grazing, timber harvesting, and, in some cases, mining. Obviously, these other activities greatly influence wildlife, and may lead to habitat loss or improvement.

Holistic management follows the idea all life, and the inorganic environment as well, form an interacting, integrated ecosystem. It demands that change in the system will be taken only after its effects on all resources are considered. Take cutting timber. It changes the ecosystem and influences all other resources. Therefore, the effects of the cutting on all resources, including wildlife, would be fully considered before a decision was made.

Numerous laws, such as the Multiple Use-Sustained Yield Act, the Endangered Species Act, the National Environmental Policy Act, and, most recently, the Forest and Rangeland Renewable Resources Planning Act and the National Forest Management Act, require full consideration of wildlife in the management of the National Forests and Grasslands, and, in some cases, on other Federal lands.

To achieve this holistic approach to managing wildlife habitat on the National Forests and National Grasslands, I think we need a five part approach. This approach could be easily adopted by other agencies and by private land owners as well. I believe it's what is needed -- what is demanded -- to insure future generations of Americans a variety of wildlife in a quality environment.

1. First and foremost we have to acknowledge that whatever we do on agricultural or forest lands affects wildlife. It may improve habitat. It may destroy habitat. Its effect may be great or small, but it does have an effect. The Department of Agriculture, through the Extension Service and other agencies, will develop an educational program to bring this important message to all people -- resource professionals and the general public.

2. Second, we need a uniform classification system of wildlife habitat on which to base wildlife inventories -- a "universal language" among biologists and land managers, who are making decisions about the use of resources that affect wildlife. I am committed to this for the Department of Agriculture, and hope that all agencies could join us in one uniform system. Wetlands habitats are the subject of such an interdepartmental classification study now.

3. We need an inventory of all wildlife associated with these habitats. The quality of our programs will be inadequate until we have such an inventory.

4. We should know the habitat needs of all species, to enable us to predict tradeoffs whenever we do something to the land. We've made some progress toward this goal. But we must assess the information we already have and conduct the research needed to fill the gaps. In a few moments, I'll describe

one system that has done just this -- and shows every likelihood of working in parts of the West. But, I want to extend this program to find the habitat needs of all species, throughout the country.

5. After we've acquired this knowledge, we can better understand the interaction of all components of an ecosystem. Then we will have the foundation for quality land management planning from the wildlife manager's standpoint. This ties in with the land management planning process now being used on National Forest lands. Through Forest Service, Soil Conservation Service and Extension Service programs of assistance to states and private landowners, this knowledge will be extended to the majority of the Nation's forest and range lands -- even to forests in our urban areas.

We will have the tools to adequately consider wildlife in these decisions. And we will be able to display for decisionmakers and the public alike what the wildlife-population tradeoffs are.

The plan developed by Forest Service wildlife researchers which promises to work in regions of the West reduces over 400 species of wildlife found in one area of the Pacific Northwest into what are called 16 "life-forms."

The key to this system is the ability to equate vegetative conditions with wildlife habitats. Two vital considerations are the plant community and the successional stage of the forest. Let me explain these terms. A "plant community" is a particular combination of plants that, under "natural" conditions, identifies a particular set of circumstances within the forest. These factors include soil type, amount of water, slope, and aspect, or the way the hillside faces and so on. These plant communities are consistent so long as the site factors don't change.

"Succession" refers to the changes that each plant community goes through over time. Just as an individual animal or tree is born, matures and later dies, a forest goes through a life cycle. For instance, after a fire, the first plants to return to the area may be annual forbs and weeds. Later grasses appear, followed by shrubs and perhaps seedlings. Then, as the seedlings mature into trees, the vegetation on the forest floor dies. Later trees die or are harvested and the process begins again.

How can we account for hundreds of species of wildlife at the same time and not get totally confused? The important thing in the management of wildlife is to know what species need, and what plant communities and successional stages provide those needs for reproduction and feeding.

Could we then lump all the species that have the same habitat requirements for feeding and reproduction into groups for management purposes? The answer is usually "yes." Such groups are called "life forms."

Such a process allows the land manager to deal with, say, 16 life forms as opposed to several hundred species. Forest Service biologists and foresters are now producing planning guides that may be used to accomplish the simultaneous accounting, over time, for wildlife habitats as well as timber and other products in our managed forests. In producing and using such a tool, we can meet our responsibilities, under law, for a more holistic approach to management of our public lands.

This approach is being applied now to some lands in the West. Before we can truly practice holistic management to enhance wildlife on all lands, we need more information on wildlife. This information can only be collected through an interagency effort involving the wildlife expertise of the States,

the Federal Government, and the public. The unknowns that are turned up by this effort will have to be answered by research.

For instance, the Forest Service is conducting intensive research to discover more about animals that are threatened with extinction. A similar major new research program is aimed at finding ways of protecting endangered or threatened plants that may occur in forests and rangelands.

The Forest Service also is undertaking a major research program to determine the impacts of various actions, including logging, on anadromous fish, which mature in the sea and then migrate to streams to spawn -- salmon, steelhead and shad, for example.

Many other new things are under way within the U.S. Department of Agriculture to help wildlife. They include new focus on wetlands evaluation management, and use. A special USDA Wetlands Task Force is speeding this effort. The Soil Conservation Service has been working with the Fish and Wildlife Service and others on a new wetland classification system, and has changed its environmental impact statement procedures in order to preserve more wetlands, for wildlife and other values.

USDA's Water Bank Program is helping preserve wetlands and develop high-quality wildlife habitat on them. Landowners in more than a dozen states where waterfowl areas are most vital take wetlands and other nearby acres out of farming. In return, they receive payments and technical help in improving the wetlands. We've worked hard this past year to cut the red tape and to involve more landowners.

The Soil Conservation Service is helping the Fish and Wildlife Service develop a highly sensitive system to evaluate wildlife values and potential in future USDA planning activities. When fully developed, the system will also help individual landowners to plan and install watershed projects or environmental and community development projects in the multi-county Resource Conservation and Development areas.

The SCS and the Fish and Wildlife Service have completed a new set of guidelines for altering stream channels. They will help us do a better job of protecting wildlife and scenic values as we make streams do a better job of moving water safety.

There is a new emphasis on rural water quality that will benefit wildlife. Federal laws already call for states and communities to develop and implement plans for improving water quality by managing land resources better -- to reduce "non-point source pollution," that is, pollution which cannot be traced back to some particular source -- a factory or sewer outlet or big feedlot.

Congress is studying whether to provide financial assistance in improving land to enhance its water quality. Other contributions to water quality will come from the Soil Conservation's Service's efforts to keep track of trends in land and water use and conservation needs. SCS already is engaged in a nationwide erosion survey, prime farmlands inventory, and other studies. The Congress is also considering whether to put these separate studies into an overall comprehensive land and water conservation program that would keep track of trends and problems and report to the people who can do something about them.

Congress is also studying whether the USDA should do more for the development of aquaculture -- that is, production of fish or other aquatic species under controlled conditions for commercial purposes in farm ponds and other water areas. USDA has provided technical help and information to thousands of landowners on "fish farming" for a long time. Our Extension Service, working with the Office of Sea Grant in the Commerce Department, also provides field advisory services on marine aquaculture. We also support research on many aspects of aquaculture through the Cooperative State Research Service and the state experiment stations.

Under the Surface Mining Control and Reclamation Act of 1977, signed just last week, USDA will help harvest coal and other energy resources in ways that do not permanently damage the environment. It sets up an abandoned mine reclamation fund to restore lands that were mined in the past. It will protect lands that are not well suited to surface mining, such as steep slopes and prime farmlands. It will help us develop conservation plans for each mine site -- plans to conserve and develop soil, water, woodland, wildlife, and recreational resources, as well as restore or improve agricultural productivity of the sites. This Federal law is long overdue.

Farmers and ranchers in 3,000 local conservation districts all over America are following conservation practices and land-use patterns that add to wildlife cover: terraces; contour cultivation; strip cropping; sod waterways; windbreaks; crop rotations; improved meadows, pastures, rangelands; woodlots; and tree planting. Through these local conservation districts USDA agencies deliver their help on wildlife and other resource management to individual citizens.

The conservation practices add to wildlife habitat on the land. They reduce erosion of soil and runoff of fertilizers and chemicals, thus protecting the habitat of fish and other aquatic life.

We are striving to manage our national forests and to help private owners manage their farm and timber lands in ways that add to, rather than detract from, important wilderness, wildlife, and esthetic values.

We need your support, to help manage resources for wildlife and human beings. I hope you will ask questions. I hope you will work with us to find answers. I hope that, while we are searching for answers on wildlife improvements and resource management, you will help us get out there and do as much as we can for wildlife on the land, instead of on paper.

There is much we can achieve together. I know that you will do your full share -- and that your enthusiasm and fresh approach will bring new excitement and new effectiveness to wildlife management programs on public and private lands nationwide.

# # # #

7411

USDA 2241-77